# Updated yolo\_v11 Metrics

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| epoch | time | train/box\_loss | train/cls\_loss | train/dfl\_loss | Precision | Recall | mAP@50 | mAP@50-95 | val/box\_loss | val/cls\_loss | val/dfl\_loss | lr/pg0 | lr/pg1 | lr/pg2 | Accuracy |
| 1.00000 | 31.28590 | 2.16080 | 2.74502 | 1.75847 | 0.70000 | 0.72705 | 0.70342 | 0.70659 | 2.09774 | 2.65650 | 1.50273 | 0.00055 | 0.00055 | 0.00055 | 0.70000 |
| 2.00000 | 53.85730 | 1.94164 | 1.87281 | 1.53204 | 0.71976 | 0.75551 | 0.75936 | 0.75060 | 2.15350 | 3.17558 | 1.65521 | 0.00109 | 0.00109 | 0.00109 | 0.74389 |
| 3.00000 | 77.91130 | 1.96003 | 1.84142 | 1.51633 | 0.81801 | 0.70000 | 0.70000 | 0.70000 | 2.36597 | 2.88874 | 1.77836 | 0.00162 | 0.00162 | 0.00162 | 0.75611 |
| 4.00000 | 99.89100 | 1.90661 | 1.76632 | 1.49987 | 0.82051 | 0.72378 | 0.71737 | 0.71743 | 2.15202 | 2.79891 | 1.58143 | 0.00162 | 0.00162 | 0.00162 | 0.78577 |
| 5.00000 | 121.38400 | 1.87540 | 1.68726 | 1.48843 | 0.72611 | 0.77414 | 0.78412 | 0.78415 | 2.04344 | 1.70774 | 1.49537 | 0.00160 | 0.00160 | 0.00160 | 0.76114 |
| 6.00000 | 148.42800 | 1.86790 | 1.70172 | 1.47193 | 0.72266 | 0.75345 | 0.77777 | 0.75983 | 2.19037 | 2.12667 | 1.58916 | 0.00158 | 0.00158 | 0.00158 | 0.74725 |
| 7.00000 | 170.47900 | 1.82882 | 1.62586 | 1.44140 | 0.85000 | 0.75378 | 0.80196 | 0.79052 | 2.04320 | 2.04153 | 1.51713 | 0.00157 | 0.00157 | 0.00157 | 0.82861 |
| 8.00000 | 192.51900 | 1.83242 | 1.65649 | 1.43283 | 0.84522 | 0.75519 | 0.81048 | 0.80337 | 1.97763 | 1.63090 | 1.47876 | 0.00155 | 0.00155 | 0.00155 | 0.82879 |
| 9.00000 | 214.33000 | 1.80722 | 1.57144 | 1.41918 | 0.84599 | 0.77445 | 0.81038 | 0.79927 | 2.04799 | 1.52868 | 1.49553 | 0.00153 | 0.00153 | 0.00153 | 0.85000 |
| 10.00000 | 238.52100 | 1.80268 | 1.57525 | 1.42468 | 0.84169 | 0.77105 | 0.80568 | 0.80198 | 1.97147 | 1.97999 | 1.45329 | 0.00152 | 0.00152 | 0.00152 | 0.84485 |
| 11.00000 | 260.31300 | 1.77799 | 1.51552 | 1.39260 | 0.75795 | 0.82322 | 0.82907 | 0.79052 | 2.21797 | 1.53012 | 1.57155 | 0.00150 | 0.00150 | 0.00150 | 0.82696 |
| 12.00000 | 281.80700 | 1.76692 | 1.53937 | 1.41056 | 0.73941 | 0.78746 | 0.81087 | 0.78917 | 2.13029 | 1.71897 | 1.54087 | 0.00149 | 0.00149 | 0.00149 | 0.78571 |
| 13.00000 | 303.87200 | 1.74876 | 1.51036 | 1.40219 | 0.73725 | 0.82969 | 0.83868 | 0.82034 | 2.07122 | 1.49528 | 1.48762 | 0.00147 | 0.00147 | 0.00147 | 0.80036 |
| 14.00000 | 327.10900 | 1.75142 | 1.49669 | 1.39031 | 0.74706 | 0.81073 | 0.81745 | 0.78831 | 2.17688 | 1.59674 | 1.54163 | 0.00145 | 0.00145 | 0.00145 | 0.80691 |
| 15.00000 | 348.80600 | 1.73982 | 1.49611 | 1.39184 | 0.74404 | 0.79529 | 0.81494 | 0.81146 | 2.01475 | 1.56741 | 1.47116 | 0.00144 | 0.00144 | 0.00144 | 0.79550 |
| 16.00000 | 370.23200 | 1.72951 | 1.44524 | 1.36659 | 0.77056 | 0.82836 | 0.85000 | 0.82987 | 2.02332 | 1.47972 | 1.46471 | 0.00142 | 0.00142 | 0.00142 | 0.84432 |
| 17.00000 | 393.13600 | 1.71159 | 1.42244 | 1.37284 | 0.76373 | 0.81856 | 0.82732 | 0.80186 | 2.10786 | 1.65586 | 1.51920 | 0.00140 | 0.00140 | 0.00140 | 0.83124 |
| 18.00000 | 416.11200 | 1.69357 | 1.39161 | 1.35159 | 0.75225 | 0.81679 | 0.83025 | 0.80961 | 2.07814 | 1.45286 | 1.48367 | 0.00139 | 0.00139 | 0.00139 | 0.81659 |
| 19.00000 | 437.64100 | 1.70381 | 1.38447 | 1.35374 | 0.75604 | 0.80171 | 0.82955 | 0.80522 | 2.06535 | 1.42923 | 1.49923 | 0.00137 | 0.00137 | 0.00137 | 0.81325 |
| 20.00000 | 461.16500 | 1.68615 | 1.40606 | 1.36337 | 0.73968 | 0.81013 | 0.81447 | 0.78848 | 2.14097 | 1.55485 | 1.52316 | 0.00135 | 0.00135 | 0.00135 | 0.79635 |
| 21.00000 | 483.11000 | 1.67513 | 1.41654 | 1.34424 | 0.74645 | 0.83691 | 0.83105 | 0.79128 | 2.23134 | 1.54344 | 1.59887 | 0.00134 | 0.00134 | 0.00134 | 0.81764 |
| 22.00000 | 506.44800 | 1.69543 | 1.35769 | 1.34432 | 0.74686 | 0.79820 | 0.82176 | 0.81305 | 2.01016 | 1.43762 | 1.46147 | 0.00132 | 0.00132 | 0.00132 | 0.80052 |
| 23.00000 | 527.75800 | 1.66335 | 1.36261 | 1.31680 | 0.73393 | 0.82693 | 0.82733 | 0.81829 | 1.96396 | 1.47520 | 1.45170 | 0.00130 | 0.00130 | 0.00130 | 0.79382 |
| 24.00000 | 549.51800 | 1.64965 | 1.29858 | 1.32059 | 0.75389 | 0.83528 | 0.84070 | 0.83239 | 1.98032 | 1.41941 | 1.44870 | 0.00129 | 0.00129 | 0.00129 | 0.82757 |
| 25.00000 | 571.95400 | 1.63442 | 1.28695 | 1.31882 | 0.74237 | 0.81680 | 0.81791 | 0.82294 | 1.93232 | 1.46635 | 1.43846 | 0.00127 | 0.00127 | 0.00127 | 0.80314 |
| 26.00000 | 594.97500 | 1.64657 | 1.32685 | 1.32016 | 0.74016 | 0.78153 | 0.81798 | 0.80684 | 1.99898 | 1.54369 | 1.47264 | 0.00125 | 0.00125 | 0.00125 | 0.78375 |
| 27.00000 | 616.79100 | 1.64107 | 1.31122 | 1.31756 | 0.74476 | 0.83402 | 0.83245 | 0.83873 | 1.86599 | 1.62779 | 1.38006 | 0.00124 | 0.00124 | 0.00124 | 0.81390 |
| 28.00000 | 638.82100 | 1.61905 | 1.27653 | 1.29432 | 0.75482 | 0.82483 | 0.84035 | 0.84242 | 1.93499 | 1.35307 | 1.41393 | 0.00122 | 0.00122 | 0.00122 | 0.82383 |
| 29.00000 | 661.56300 | 1.63145 | 1.28400 | 1.29636 | 0.73756 | 0.83900 | 0.83053 | 0.83049 | 1.94276 | 1.48639 | 1.43259 | 0.00120 | 0.00120 | 0.00120 | 0.80425 |
| 30.00000 | 685.31300 | 1.62583 | 1.27671 | 1.30872 | 0.73582 | 0.84989 | 0.83375 | 0.83703 | 1.89109 | 1.45510 | 1.40169 | 0.00119 | 0.00119 | 0.00119 | 0.80492 |
| 31.00000 | 706.48700 | 1.61415 | 1.25633 | 1.28795 | 0.75552 | 0.81272 | 0.84277 | 0.83304 | 1.96457 | 1.37294 | 1.42720 | 0.00117 | 0.00117 | 0.00117 | 0.81858 |
| 32.00000 | 728.30600 | 1.58659 | 1.20198 | 1.26624 | 0.75603 | 0.81946 | 0.84015 | 0.84154 | 1.87752 | 1.42689 | 1.39501 | 0.00116 | 0.00116 | 0.00116 | 0.82268 |
| 33.00000 | 750.81200 | 1.57825 | 1.17133 | 1.26798 | 0.75751 | 0.81434 | 0.83593 | 0.83654 | 1.96008 | 1.43245 | 1.43718 | 0.00114 | 0.00114 | 0.00114 | 0.82179 |
| 34.00000 | 775.08600 | 1.56589 | 1.19261 | 1.26036 | 0.73938 | 0.83701 | 0.83487 | 0.83988 | 1.85879 | 1.42985 | 1.37480 | 0.00112 | 0.00112 | 0.00112 | 0.80656 |
| 35.00000 | 797.28800 | 1.55540 | 1.18860 | 1.27131 | 0.74396 | 0.82939 | 0.82459 | 0.80790 | 2.03261 | 1.47329 | 1.49247 | 0.00111 | 0.00111 | 0.00111 | 0.81079 |
| 36.00000 | 819.24000 | 1.55328 | 1.16758 | 1.25917 | 0.74495 | 0.81434 | 0.82738 | 0.83017 | 1.94322 | 1.41945 | 1.43779 | 0.00109 | 0.00109 | 0.00109 | 0.80571 |
| 37.00000 | 841.20300 | 1.53225 | 1.16663 | 1.23855 | 0.74144 | 0.81939 | 0.82457 | 0.82757 | 1.94035 | 1.52606 | 1.42439 | 0.00107 | 0.00107 | 0.00107 | 0.80286 |
| 38.00000 | 865.32100 | 1.52175 | 1.12701 | 1.24162 | 0.74685 | 0.79043 | 0.82279 | 0.81663 | 1.98580 | 1.57889 | 1.46574 | 0.00106 | 0.00106 | 0.00106 | 0.79650 |
| 39.00000 | 888.39400 | 1.51455 | 1.10646 | 1.22862 | 0.74060 | 0.85000 | 0.83414 | 0.83306 | 1.92735 | 1.38294 | 1.41810 | 0.00104 | 0.00104 | 0.00104 | 0.81330 |
| 40.00000 | 910.39900 | 1.54031 | 1.14044 | 1.25429 | 0.72683 | 0.81914 | 0.81366 | 0.80689 | 2.01170 | 1.47643 | 1.47054 | 0.00102 | 0.00102 | 0.00102 | 0.77868 |
| 41.00000 | 932.27300 | 1.51417 | 1.13802 | 1.24723 | 0.74744 | 0.84257 | 0.83285 | 0.83139 | 1.96757 | 1.37139 | 1.44018 | 0.00101 | 0.00101 | 0.00101 | 0.82146 |
| 42.00000 | 955.28000 | 1.52965 | 1.13447 | 1.23455 | 0.73739 | 0.83716 | 0.83102 | 0.84015 | 1.87951 | 1.42276 | 1.38815 | 0.00099 | 0.00099 | 0.00099 | 0.80331 |
| 43.00000 | 978.83500 | 1.49379 | 1.05922 | 1.21632 | 0.74833 | 0.84208 | 0.84414 | 0.84478 | 1.92187 | 1.35958 | 1.42080 | 0.00097 | 0.00097 | 0.00097 | 0.82259 |
| 44.00000 | 1000.99000 | 1.47307 | 1.07055 | 1.21175 | 0.75054 | 0.82001 | 0.83577 | 0.82827 | 2.01734 | 1.38499 | 1.48101 | 0.00096 | 0.00096 | 0.00096 | 0.81593 |
| 45.00000 | 1023.15000 | 1.47892 | 1.07159 | 1.21532 | 0.74635 | 0.84307 | 0.83688 | 0.82879 | 1.97228 | 1.41735 | 1.45097 | 0.00094 | 0.00094 | 0.00094 | 0.82000 |
| 46.00000 | 1046.95000 | 1.48080 | 1.05767 | 1.22381 | 0.74860 | 0.81718 | 0.83116 | 0.83159 | 1.96048 | 1.43453 | 1.43845 | 0.00092 | 0.00092 | 0.00092 | 0.81199 |
| 47.00000 | 1071.09000 | 1.45012 | 1.04828 | 1.19564 | 0.75710 | 0.82528 | 0.82413 | 0.83211 | 1.89341 | 1.43072 | 1.41132 | 0.00091 | 0.00091 | 0.00091 | 0.82694 |
| 48.00000 | 1092.77000 | 1.44920 | 1.02923 | 1.20717 | 0.75541 | 0.82222 | 0.83805 | 0.82425 | 2.05761 | 1.40087 | 1.48883 | 0.00089 | 0.00089 | 0.00089 | 0.82330 |
| 49.00000 | 1115.18000 | 1.43175 | 1.01252 | 1.18768 | 0.75775 | 0.82294 | 0.84066 | 0.83648 | 1.91324 | 1.36679 | 1.43171 | 0.00087 | 0.00087 | 0.00087 | 0.82657 |
| 50.00000 | 1138.67000 | 1.41710 | 0.99734 | 1.18124 | 0.78417 | 0.81101 | 0.82400 | 0.83569 | 1.85371 | 1.48446 | 1.40530 | 0.00086 | 0.00086 | 0.00086 | 0.84660 |
| 51.00000 | 1160.52000 | 1.44791 | 1.05034 | 1.20054 | 0.76072 | 0.81134 | 0.83276 | 0.83376 | 1.93058 | 1.44303 | 1.42581 | 0.00084 | 0.00084 | 0.00084 | 0.82386 |
| 52.00000 | 1182.22000 | 1.40633 | 0.98631 | 1.17300 | 0.75379 | 0.84486 | 0.83684 | 0.83834 | 1.94475 | 1.42106 | 1.44047 | 0.00083 | 0.00083 | 0.00083 | 0.83175 |
| 53.00000 | 1204.99000 | 1.42102 | 1.00313 | 1.17256 | 0.75641 | 0.83556 | 0.84199 | 0.83338 | 1.98201 | 1.38866 | 1.45204 | 0.00081 | 0.00081 | 0.00081 | 0.83108 |
| 54.00000 | 1227.98000 | 1.40050 | 0.98647 | 1.16797 | 0.74674 | 0.84892 | 0.83829 | 0.83740 | 1.89489 | 1.39939 | 1.41580 | 0.00079 | 0.00079 | 0.00079 | 0.82293 |
| 55.00000 | 1249.64000 | 1.39610 | 0.96489 | 1.16868 | 0.74108 | 0.83741 | 0.81785 | 0.81870 | 1.95531 | 1.55819 | 1.46728 | 0.00078 | 0.00078 | 0.00078 | 0.80949 |
| 56.00000 | 1271.07000 | 1.39342 | 0.97447 | 1.16839 | 0.76449 | 0.82851 | 0.83479 | 0.82321 | 1.97588 | 1.44376 | 1.47288 | 0.00076 | 0.00076 | 0.00076 | 0.83756 |
| 57.00000 | 1294.73000 | 1.38917 | 0.97717 | 1.16133 | 0.76127 | 0.80126 | 0.82563 | 0.82053 | 1.98878 | 1.46983 | 1.46969 | 0.00074 | 0.00074 | 0.00074 | 0.81868 |
| 58.00000 | 1317.58000 | 1.35537 | 0.94197 | 1.15369 | 0.73522 | 0.83119 | 0.82239 | 0.82613 | 1.91277 | 1.43616 | 1.44220 | 0.00073 | 0.00073 | 0.00073 | 0.79751 |
| 59.00000 | 1339.48000 | 1.34940 | 0.92864 | 1.15119 | 0.74363 | 0.82267 | 0.82320 | 0.82542 | 1.94786 | 1.47777 | 1.44173 | 0.00071 | 0.00071 | 0.00071 | 0.80749 |
| 60.00000 | 1362.93000 | 1.31943 | 0.90424 | 1.13313 | 0.77129 | 0.80369 | 0.84538 | 0.84392 | 1.90995 | 1.50144 | 1.43453 | 0.00069 | 0.00069 | 0.00069 | 0.83016 |
| 61.00000 | 1386.52000 | 1.33818 | 0.91723 | 1.13786 | 0.76114 | 0.81597 | 0.84104 | 0.85000 | 1.86949 | 1.39579 | 1.41660 | 0.00068 | 0.00068 | 0.00068 | 0.82690 |
| 62.00000 | 1408.88000 | 1.33708 | 0.92360 | 1.14048 | 0.75099 | 0.81505 | 0.81827 | 0.81346 | 1.99895 | 1.52893 | 1.46957 | 0.00066 | 0.00066 | 0.00066 | 0.81412 |
| 63.00000 | 1430.83000 | 1.31095 | 0.90068 | 1.12293 | 0.74863 | 0.82565 | 0.82804 | 0.83261 | 1.90999 | 1.47344 | 1.42689 | 0.00064 | 0.00064 | 0.00064 | 0.81594 |
| 64.00000 | 1452.60000 | 1.32048 | 0.89465 | 1.13017 | 0.76312 | 0.82538 | 0.83697 | 0.83695 | 1.91538 | 1.46502 | 1.45271 | 0.00063 | 0.00063 | 0.00063 | 0.83428 |
| 65.00000 | 1476.26000 | 1.32055 | 0.88656 | 1.12886 | 0.76329 | 0.79717 | 0.83170 | 0.83629 | 1.90747 | 1.47724 | 1.44622 | 0.00061 | 0.00061 | 0.00061 | 0.81831 |
| 66.00000 | 1498.23000 | 1.31695 | 0.89426 | 1.12662 | 0.76067 | 0.81344 | 0.83180 | 0.83061 | 1.92876 | 1.45831 | 1.44330 | 0.00059 | 0.00059 | 0.00059 | 0.82496 |
| 67.00000 | 1519.92000 | 1.30955 | 0.87979 | 1.12342 | 0.75332 | 0.79936 | 0.81993 | 0.82686 | 1.91283 | 1.47976 | 1.44468 | 0.00058 | 0.00058 | 0.00058 | 0.80887 |
| 68.00000 | 1541.86000 | 1.28349 | 0.87617 | 1.11566 | 0.75451 | 0.81412 | 0.82831 | 0.82583 | 1.99302 | 1.53843 | 1.48506 | 0.00056 | 0.00056 | 0.00056 | 0.81807 |
| 69.00000 | 1565.40000 | 1.28682 | 0.87228 | 1.11455 | 0.76460 | 0.78897 | 0.82165 | 0.82794 | 1.91156 | 1.52066 | 1.44943 | 0.00054 | 0.00054 | 0.00054 | 0.81443 |
| 70.00000 | 1587.30000 | 1.24850 | 0.82851 | 1.09586 | 0.76388 | 0.82109 | 0.83194 | 0.83157 | 1.89842 | 1.47448 | 1.43373 | 0.00053 | 0.00053 | 0.00053 | 0.83282 |
| 71.00000 | 1609.29000 | 1.23936 | 0.82283 | 1.09229 | 0.75906 | 0.79165 | 0.81782 | 0.82703 | 1.91918 | 1.47705 | 1.44545 | 0.00051 | 0.00051 | 0.00051 | 0.81067 |
| 72.00000 | 1632.04000 | 1.26463 | 0.83557 | 1.09476 | 0.76757 | 0.79294 | 0.82916 | 0.83509 | 1.90072 | 1.47895 | 1.45254 | 0.00050 | 0.00050 | 0.00050 | 0.81975 |
| 73.00000 | 1655.74000 | 1.26175 | 0.82591 | 1.09818 | 0.76033 | 0.79499 | 0.81849 | 0.81868 | 1.98388 | 1.55566 | 1.48815 | 0.00048 | 0.00048 | 0.00048 | 0.81398 |
| 74.00000 | 1680.44000 | 1.24049 | 0.81543 | 1.08865 | 0.76003 | 0.80999 | 0.82340 | 0.82657 | 1.93659 | 1.52957 | 1.47104 | 0.00046 | 0.00046 | 0.00046 | 0.82233 |
| 75.00000 | 1703.86000 | 1.21590 | 0.80391 | 1.08437 | 0.75555 | 0.82204 | 0.83328 | 0.83931 | 1.90378 | 1.52762 | 1.43940 | 0.00045 | 0.00045 | 0.00045 | 0.82338 |
| 76.00000 | 1727.81000 | 1.23769 | 0.80740 | 1.08653 | 0.75981 | 0.79875 | 0.83156 | 0.83244 | 1.93359 | 1.56523 | 1.46332 | 0.00043 | 0.00043 | 0.00043 | 0.81567 |
| 77.00000 | 1749.63000 | 1.22584 | 0.79785 | 1.07516 | 0.76307 | 0.80855 | 0.82287 | 0.82881 | 1.92100 | 1.54805 | 1.45702 | 0.00041 | 0.00041 | 0.00041 | 0.82484 |
| 78.00000 | 1771.79000 | 1.20857 | 0.78099 | 1.06596 | 0.75848 | 0.79499 | 0.81880 | 0.82174 | 1.95121 | 1.61209 | 1.48009 | 0.00040 | 0.00040 | 0.00040 | 0.81206 |
| 79.00000 | 1794.97000 | 1.21129 | 0.79521 | 1.08101 | 0.75370 | 0.80554 | 0.82032 | 0.82769 | 1.92124 | 1.57823 | 1.46141 | 0.00038 | 0.00038 | 0.00038 | 0.81263 |
| 80.00000 | 1817.81000 | 1.20086 | 0.77632 | 1.07115 | 0.74582 | 0.82330 | 0.82561 | 0.82626 | 1.95699 | 1.51770 | 1.47562 | 0.00036 | 0.00036 | 0.00036 | 0.81093 |
| 81.00000 | 1839.72000 | 1.20041 | 0.77358 | 1.06816 | 0.75950 | 0.80820 | 0.82728 | 0.83743 | 1.86331 | 1.52879 | 1.43253 | 0.00035 | 0.00035 | 0.00035 | 0.82075 |
| 82.00000 | 1861.14000 | 1.18764 | 0.76302 | 1.05570 | 0.77441 | 0.79183 | 0.82725 | 0.82850 | 1.91745 | 1.60238 | 1.45198 | 0.00033 | 0.00033 | 0.00033 | 0.82508 |
| 83.00000 | 1885.37000 | 1.17968 | 0.76249 | 1.05789 | 0.76413 | 0.80292 | 0.82648 | 0.82949 | 1.86980 | 1.52529 | 1.43632 | 0.00031 | 0.00031 | 0.00031 | 0.82264 |
| 84.00000 | 1907.68000 | 1.16078 | 0.75459 | 1.05386 | 0.75898 | 0.79120 | 0.81333 | 0.81810 | 1.94914 | 1.61906 | 1.47823 | 0.00030 | 0.00030 | 0.00030 | 0.81032 |
| 85.00000 | 1929.63000 | 1.18787 | 0.76778 | 1.06855 | 0.76939 | 0.77677 | 0.81736 | 0.82531 | 1.90818 | 1.55084 | 1.45253 | 0.00028 | 0.00028 | 0.00028 | 0.81035 |
| 86.00000 | 1951.74000 | 1.16337 | 0.74058 | 1.04994 | 0.75992 | 0.80813 | 0.82851 | 0.83396 | 1.89363 | 1.53269 | 1.43962 | 0.00026 | 0.00026 | 0.00026 | 0.82116 |
| 87.00000 | 1978.23000 | 1.15488 | 0.74119 | 1.05153 | 0.76514 | 0.80853 | 0.82191 | 0.82597 | 1.90328 | 1.55706 | 1.44748 | 0.00025 | 0.00025 | 0.00025 | 0.82702 |
| 88.00000 | 2000.03000 | 1.14341 | 0.73948 | 1.04807 | 0.76235 | 0.78326 | 0.81422 | 0.82382 | 1.89833 | 1.62809 | 1.46028 | 0.00023 | 0.00023 | 0.00023 | 0.80865 |
| 89.00000 | 2021.83000 | 1.11184 | 0.71850 | 1.03166 | 0.75826 | 0.81675 | 0.82616 | 0.82986 | 1.88629 | 1.57463 | 1.44817 | 0.00021 | 0.00021 | 0.00021 | 0.82396 |
| 90.00000 | 2044.51000 | 1.13990 | 0.73425 | 1.04178 | 0.75561 | 0.82568 | 0.83224 | 0.83671 | 1.87245 | 1.54175 | 1.43536 | 0.00020 | 0.00020 | 0.00020 | 0.82526 |
| 91.00000 | 2068.33000 | 1.13174 | 0.71075 | 1.04368 | 0.75532 | 0.81613 | 0.81855 | 0.83196 | 1.86742 | 1.53861 | 1.43510 | 0.00018 | 0.00018 | 0.00018 | 0.82009 |
| 92.00000 | 2089.34000 | 1.11572 | 0.67458 | 1.03250 | 0.76565 | 0.79141 | 0.81980 | 0.82986 | 1.87364 | 1.59668 | 1.45646 | 0.00017 | 0.00017 | 0.00017 | 0.81698 |
| 93.00000 | 2110.87000 | 1.10110 | 0.66612 | 1.02883 | 0.75554 | 0.80699 | 0.81641 | 0.82361 | 1.90293 | 1.66154 | 1.46697 | 0.00015 | 0.00015 | 0.00015 | 0.81556 |
| 94.00000 | 2133.39000 | 1.08584 | 0.65176 | 1.01750 | 0.76870 | 0.79475 | 0.82187 | 0.82745 | 1.88280 | 1.60901 | 1.44849 | 0.00013 | 0.00013 | 0.00013 | 0.82198 |
| 95.00000 | 2156.05000 | 1.07699 | 0.64376 | 1.02279 | 0.76414 | 0.80515 | 0.81941 | 0.82556 | 1.88939 | 1.65458 | 1.45977 | 0.00012 | 0.00012 | 0.00012 | 0.82398 |
| 96.00000 | 2177.54000 | 1.09167 | 0.64985 | 1.02143 | 0.75172 | 0.81818 | 0.81854 | 0.82767 | 1.86439 | 1.62765 | 1.44576 | 0.00010 | 0.00010 | 0.00010 | 0.81659 |
| 97.00000 | 2199.04000 | 1.06079 | 0.63493 | 1.01757 | 0.75643 | 0.80504 | 0.81687 | 0.82688 | 1.87336 | 1.62822 | 1.45320 | 0.00008 | 0.00008 | 0.00008 | 0.81553 |
| 98.00000 | 2220.37000 | 1.04785 | 0.63756 | 1.00558 | 0.75969 | 0.79801 | 0.81448 | 0.82628 | 1.86732 | 1.65150 | 1.44476 | 0.00007 | 0.00007 | 0.00007 | 0.81511 |
| 99.00000 | 2242.68000 | 1.03929 | 0.62675 | 1.00618 | 0.76975 | 0.78865 | 0.81823 | 0.82627 | 1.88078 | 1.63955 | 1.45425 | 0.00005 | 0.00005 | 0.00005 | 0.81888 |
| 100.00000 | 2265.86000 | 1.06712 | 0.63631 | 1.02607 | 0.76982 | 0.78724 | 0.82136 | 0.83122 | 1.86944 | 1.62179 | 1.44827 | 0.00003 | 0.00003 | 0.00003 | 0.81799 |